Performance of Foreign Multinationals and Domestic Companies in India Since Liberalisation: A Comparative Study

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1.Introduction

Governments at the national as well as those at the sub-national(regional) level across the developing countries have been actively competing with each other to promote Foreign Direct Investment (FDI). The interest shown by these economies in promoting FDI is due to certain important reasons. The most prominent among them being (1) it is a non-debt creating financial capital to the host economies. (2) It promotes export of manufactured products from the host economies and (3) Foreign Multinationals Companies act as major source facilitating the transfer of state-of-the art technology to the local economies. Ever since the implementation of economic reforms of 1991, the Government of India (GOI) has been actively involved in facilitating the inflow of FDI into various sectors of the economy. The Government dismantled the various bottlenecks that were hindering the inflow of FDI with the announcement of 'New Industrial Policy Statement of 1991'. This policy shift towards foreign capital inflows is mainly to exploit the advantages of transfer of technology, marketing expertise, introduction of modern management techniques, and promotion of export (Subrahmanian et al. 1994).

Given the importance of FDI in the new economic set up the present study analyses the overall performance of foreign multinationals and domestic companies in India since liberalisation. The paper is organised as follows. Section II discusses review of literature followed by the significance of the present study in Section III. Section IV describes the methodology and data sources. The analyses of the performance of foreign multinationals and domestic companies on the three broad performance dimensions viz., financial, trade, and technology is undertaken in Section V and finally, Section VI provides conclusion with some policy suggestions and the issues for further research.

2. Review of Literature

Background of the Government Policy towards FDI

For long, India had a restrictive policy regime in terms of restriction on a freer inward foreign direct investment with minuscule inflows in relation to the size of the economy. However, this has changed recently and the government is making considerable efforts to attract foreign investors by relaxing many of its policies, tight controls and streamlining procedures of entry (Lall, 1999). Further, in the earlier periods, especially during the 1944 Bombay Plan, the leading industrialists left no room for foreign venture (Chandra, 1991). There are at least two reasons as to why governments both at the national as well as regional level were not interested in attracting FDI to India in the post independence

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period. Firstly, there was a strong nation-wide agitation towards the 'colonialism' with its inception in the British regime. This is evident from the statement of Advisory Planning Board of the Interim government in 1946-47 that 'foreign vested interests once created would be difficult to dislodge' (Chaudhury, 1984; cited in Chandra, 1991). Secondly, Government of India followed a semi-socialist autarkic economy (Srinivasan, 2005) path for development in which public sector played a dominant role over the private sector in order to achieve the path of 'strategic' mixed economy. The 1956 resolution on industrial policy reflected a tilt towards 'socialistic pattern' with large chunks of heavy industry embarked for the public sector to the exclusion of private capital (Chandra, 1991). To attain this, the Second Five-Year Plan (SFYP)/Mahalanobis Plan Model (1956-61) was a major step forward. Moreover, government also adopted a stringent restrictive attitude towards FDI in the late 1960s (Kumar, 2005). Foreign Exchange Regulation Act (FERA) in 1973 stipulated that foreign firms should not have equity more than forty per cent, with exemptions being given at government's discretion (Nagaraj, 2003). However, by the 1980s, Indian policy makers and academics had accepted the need to liberalise the economy through a gradual relaxation of the foreign direct investment rules, which got strengthened after a severe macroeconomic crisis in 1990s (Lall, 1999). It was universally recognised that India was passing through an all-pervading 'fiscal crisis'. As a result, Government of India initiated a process of reform covering financial, external and industry sectors with significant changes in policies and attitudes towards FDI as explicitly stated in 'New Industrial Policy Statement, on July 24, 1991'. Nowadays, India seeks to consciously 'benchmark' its policies and attitudes against those of the rapidly growing South - East and East Asian economies to attract a greater share of the world's foreign capital inflows. Though a distinction needs to be made between India's approved foreign investment inflows and actual FDI, it has tended to narrow down with almost disappearing by the year 2002 (refer Table-1). As a result of liberalising India's highly regulated FDI policy, which had been in place for more than three decades there has been voluminous increase in the inflow of FDI to our country (Balasubramanyam et al. 2004). Given the liberalisation of regulated FDI policy, the ultimate issue relates to the lack of reflection of FDI quantum in India.

Table-1: Approvals and Actual Flows of FDI in India, 1991-2002

Year	Approved FDI (US$ mn)	Actual FDI Flows (US$ mn)
1991	218.3	143.6
1992	1485.5	258.0
1993	2890.5	582.9
1994	4522.5	1048.5
1995	10213.9	2172.0
1996	10510.9	3020.9
1997	15302.9	4579.1
1998	7800.9	3377.2
1999	6753.9	4016.1
2000	8613.8	4498.1
2001	5972.2	4281.1
2002	2320.8	4434.5

Source: Secretariat for Industrial Assistance (SIA, 2002) and RBI Annual Report (2005)

Determinants of FDI in India

Studies show that a number of factors determine FDI inflows to host economies. Kumar (2005) has pointed out that FDI flow is usually associated with two broad factors. First, structural factors such as quality of infrastructure, market size (income levels and population), extend of urbanisation, and geographical and cultural proximity with major sources of capital. Second, policy factors such as tax rates including tax concession, investment incentives, and performance requirements. On the other hand, Jha (2003) has pointed out six major constraints working in India against FDI. First, Image and Attitude: there is a perception among foreign investors that foreign businesses are still treated with suspicion and distrust in India. Second, Domestic Policy: while the FDI inflows policy is quite straightforward and getting increasingly liberalised for most sectors, once an investor establishes his presence, "national" treatment means that this investor is subject to domestic regulations, which are perceived as being excessive. Third, Procedures: there is difficulty in getting approval or permission from central, state and local governments thereby resulting substantial implementation lags. Fourth, Quality of Infrastructure: foreign investors show greater concern towards problems particularly unfolding to electricity and transport. Fifth, State Government Level Obstacles: differences in state policies and practices especially in providing better facilities such as land records, power, water connections etc., although the levels of such barriers has come down recently. Sixth, Delays in Legal Process: a highly structured legal system, dispute settlement and contract enforcement are time consuming activities in India. Such reasons deter the rapid flow of FDI. Lall (1999) claims that export-oriented FDI depend upon a large number of factors. A developing country today has to offer more than cheap labour, a skilled and disciplined work force with advanced technical skills. This has to be supported by excellent infrastructure, low business transaction costs, inputs at world market prices, national treatment for MNCs and stable transparent policies. Sachs and Bajpai (2000) have pointed out that there are several other factors that make India a far less attractive ground for direct investment. Some of the striking deterrents include limited scale of export processing zones, no liberalisation in exit barriers, high corporate tax rates, high tariff rates by international standards, stringent labour laws, and financial sector reforms. Here it is important to indicate that in recent times especially since 1991, such regulations and other restrictive policies has come down drastically. Although, the magnitude of FDI inflows received by our country would appear too small in comparison to other foreign capital receiving countries e.g., South East and East–Asian countries, including China and other economies in the region (Kumar, 2005).

Technology Spillovers and FDI

Foreign direct investment/FMCs considered by the host country governments as a leading channel of technology transfer. However, there is very little research done on this issue According to Bell and Marin (2006), 'the usual perspective on technology spillovers from FDI sees the MNCs subsidiaries as a passive actor. It presumes that the technological superiority that spreads from subsidiaries to other firms in the host economy is initially created outside it by MNC's parent companies and is delivered to subsidiaries via international technology transfer'. This is because foreign multinationals companies appear to be spending huge amount on R&D activity. For instance, according to Dunning (1994) multinational companies have conducted most of the world's Research and Development (R&D) activities (early in the 1980s, 75 to 80 per cent of privately

undertaken R&D) in the world as well as knowledge transfer to the foreign affiliates. But knowledge transfer might be through leaked-out. Sjoholm (1999) offered different ways of channelling technological spillovers (i) labour turnover from multinational to domestic firms, technical assistance and support to suppliers and customers, (ii) demonstration effects on domestic firms in issues such as choice of technology, export-behaviour, managerial practices and techniques, etc. This demonstration effect on domestic firms is accompanied by knowledge spillovers. Kumar (2005) evidenced knowledge spillovers to be positive from foreign to domestic firms especially when the technology gap between the two is not wide. When the technology gap is wide, the entry of firms may affect the productivity of domestic companies adversely. According to Sjoholm (1999) 'positive spillovers are found in Australia, Canada, and Mexico and no spillovers are found in Morocco and Venezuela. It shows the contradicting results in the case of relationship between FDI and technological spillovers in various countries. In the case of India, there is no strong evidence to support the technological spillovers from MNCs to local firms. Some firms might have benefited from spillovers, but such benefits were modest in pre-liberalisation period, though it goes up sharply in post liberalisation period However, not all-domestic firms have gained equally from technology spillovers of FDI (Siddharthan and Lall, 2004). Here, it is necessary to mention that, excessive dependence on foreign technology not only have economic but may also have some other undesirable social-cultural and political implications (Kumar, 1991).

Importance and Performance of Foreign Multinationals and Domestic Companies on Export in Manufacturing Sector

Foreign affiliates active in export markets can be significantly affected by host country's trade regime (UNCTAD, 2001). Various scholars in different countries have tested the considerable role of foreign affiliates in the export of manufactured goods. To name a couple of them are: for China (Fu and Balasubramanyam, 2005), for America (Vernon, 1971), for Brazil (Cohen 1973, 1975; Willmore 1976, 1986, 1992), for India (Leipziger, 1976), for India (Subrahmanian and Mohanan Pillai, 1979), for India (Lall and Kumar, 1981), for India (Lall and Mohammad, 1983), for India (Kumar, 1994), and for Mexico (Lopez, 2005). Cohen (1975) argued that foreign firms have negligible economic benefits when compared to local firms producing and exporting same products. According to Saxena (1987) MNCs activities may affect the host country's manufacturing exports through influence of technology, effect of distribution, government revenue effect, and instability effect.

Transnational corporations control approximately 30 per cent of total manufacturing output of the Central American Common Markets. Moreover, MNEs accounted for 70 per cent of the manufacturing output in Zimbabwe, 63 per cent in Singapore, 44 per cent in Malaysia, 36 per cent in Venezuela and 32 per cent in Brazil (UNCTC, 1988, cited in Kumar, 1990)[2]. It is sometimes hypothesized that foreign controlled firms have good international connection, greater propensity to engage in foreign trade and better access to the world market than the local owned firms (Willmore, 1976). Foreign multinationals appear to be performing better than domestic companies. There are at least two reasons as to why domestic companies appear to be poorer. Firstly, according to Morrison (1976)

[2] Kumar (1990)

the available empirical evidence supports the view that domestic market size and economic development are important determinants of the performance of manufacturing firms. Secondly, the devaluation of the currency is a major reason for investment by foreign affiliates. This devaluation of currency has been accompanied by dominance of foreign multinationals in trade say for instance countries like Indonesia, Thailand, India, Malaysia, Mexico, Argentina and so on (UNCTAD, 1998).
However, it can be criticized that the MNCs' greatest contribution is not in the area of export earnings. Johnson (1971), and May (1970) argue that because of comparative cost advantages and greater capacities in the areas of marketing, management techniques, and technological capability, the MNCs will out-perform their local rivals in exporting their products and thus in generating foreign exchange earnings (Muller and Morgenstern 1971). In Mexico, results suggest that in terms of profitability, growth and in export performance the Mexican firms were competing successfully compared to MNCs during the period 1966-73.

In India, since late 1970s, there are few authors like Leipziger (1976), Subrahmanian and Mohanan Pillai (1979), Lall and Kumar (1981), Lall and Mohammad (1983), Saxena (1987), Kumar (1990), Pant (1993), Subrahmanian and Joseph (1994), Ganesh (1997) Joseph (2000), and Kumar (2005) who made significant contributions and propelled academic debates on trade performance between foreign multinationals and domestic companies. Yet these studies failed to explore the overall trade performance of foreign multinationals and domestic companies in India since 1991. Furthermore, there is no consensus among the scholars in the case of the overall impact and the performance of foreign multinationals companies in India.

The contribution that MNCs make to the growth, employment, market competitiveness, technology transfer for developing/LDCs has been a subject of debate, in particular, MNCs impact on export of manufactured products in the last three or four decade. Lall (1983) stated 'foreign ownership has a positive impact on export performance'. In contrast, evidence from India does not provide any considerable proof to support a positive/direct relationship between foreign ownership and export performance. More specifically, for such firms the actual export performance was found to be poorer than local or indigenous counterparts (Subrahmanian and Mohanan Pillai, 1979). According to Joseph (2000) 'foreign ownership is found to have no significant effect on the export. The domestic engineering companies have made the domestic market much more attractive than that of international market. Indigenous companies are non-competitive in the world markets, either because they are inefficient or undersized, or because they are operating without technologies that handicap their expansion (Lall and Kumar, 1981). However, here it is important to indicate that, the number of foreign collaborations approved by the government of India for the products under the category of engineering goods up to 1967 accounted for more than 66.0 per cent of the total collaboration agreements in manufacturing sector. In fact, there are three industries such as machinery, machine tools and electrical equipment industries, which are in fact the top three industries for importing technology. The second survey on foreign collaboration for 1964-70 showed restrictive clauses (such as permission of collaborator for exports, prohibition of exports to certain countries, the prohibition of certain types of products and

so on) in 60 per cent of the agreements and export constraints in 76 per cent of the clauses (Subrahmanian and Mohanan Pillai, 1979).

Foreign Multinationals played a significant role in India's foreign trade. For example, the share of foreign multinational exports was 41.09 per cent during the period 1979-1980. Also total exports by the sampled multinational firms from engineering goods industry was the highest with 47.36 per cent followed by 7.46 per cent in textiles industry, 0.19 per cent in chemicals industry and 5.15 per cent in tea industry (Saxena, 1987). According to Pant (1993) there is no consensus on the relative export performance of foreign and domestic firms with the sole exception of pharmaceutical industry.

The long history of academic debate in economic literature has shown that considerable controversy exists over whether MNCs have in fact, promoted manufactured exports from developing countries (Lall et al. 1983). Here, it is important to indicate that, most studies have looked into the case of export promotion impact of MNCs rather than trade impacts like import, foreign net earnings, imported rawmaterial etc. It is not surprising that the recent and growing literature in this area is mainly concentrating on comparing export performance of local and foreign-controlled enterprises. There is also a serious methodological problem. Such comparisons generally do not take account of other factors including, size of exports, exports of different products and so on, at the firm or industry level, which may account for different export propensities of foreign and local firms. Newfarmer and Marsh (1981) is an exception to the simple comparison approach and they have econometrically tested the performance of export of multinational companies (Lall and Mohammad, 1983; Athukorala et al. 1995).

Table-2: Methods and Results of the Selected Studies on Export Performance between Foreign Multinationals and Domestic Companies, and Impact of FDI on Export[1]

Author	**Year**	**Country**	**Methods**	**Results***
Cohen	1975	Singapore	No Significant Test	FF < DF
Cohen	1975	South Korea	No Significant Test	FF > DF
Cohen	1975	Taiwan	No Significant Test	FF and DF not different
Riedel	1975	Taiwan	ANOVA	FF>DF in1 of 6 industries
Willmore	1976	Costa Rica	Matched Pairs	FF>DF
Morgenstern & Muller	1976	Latin America	Regression	FF and DF not different
Fairchild	1977	Mexico	Matched Pairs	FF and DF not different
Carvalho	1977	Mexico & C. America etc.	Matched Pairs	FF and DF not different
Gershenberg & Ryan	1978	Uganda	t – test	FF and DF not different
Subrahmanian & Mohanan(P)	1979	India	Matched Pairs	DF>FF
Jenkins	1979	Mexico	z –test	DF>FF in 2 of 4 industries
Newfarmer & Marsh	1981	Brazil	Regression	FF and DF not different

Chen	1983	Hong Kong	ANOVA	FF> DF in 1 of 4 and DF> FF in 2 of 4 industries
Chen	1983	Malaysia	Matched Pairs	FF & DF not different
Lall & Sharif	1983	India	OLS	FF>DF
Willmore	1986	Brazil	Matched Pairs	FF>DF
Kumar	1990	India	OLS	FF and DF not different
Willmore	1992	Brazil	Logit & OLS	FF>DF
Pant	1993	India	Logit & OLS	FF and DF not different
Subrahmanian & Joseph	1994	India	Logit & OLS	FF and DF not ** different
Athukorala, et al.	1995	Sri Lanka	Selection corrected export function	DCMNEs[a] and DF not different
Joseph	2000	India	Fixed effect model	FO is found to have no significant effect on Export
Sharma	2000	India	Simultaneous Equation	FDI appears to have statistically no impact on export

[1]Jenkins (1990) and Joseph (2000), [a] Developed country multinational enterprises (DCMNEs),*Significant at the 5 per cent level, ** Coefficient of foreign ownership is found to have negative (not statistically significant) effect on export, and FO = foreign ownership.

Comparison of the conduct and performance of foreign controlled enterprises (FCEs) and local-controlled enterprises (LCEs) suggests that the degree of import dependence of FCEs is not significantly different from that of local firms. Foreign controlled firms also do not export a significantly different proportion of sales than that of local counterparts. More specifically, the empirical results did not reveal any significant difference in the industry characteristics of exports of foreign controlled-enterprises and local counterparts (Kumar, 1994). However, according to Subrahmanian and Joseph (1994) evidence shows that, out of the total 50 sample pairs, foreign firms show poor performance relative to local firms in majority (30 pairs) cases. Also the average value of the ratio of export to output (export-intensity) of all foreign firms taken together appears to be lower than that of average for local firms. The difference between the overall average export–output ratio of foreign firms (10.1 per cent) and local firms (11.2 per cent) is found statistically significant.

To conclude, three main arguments have been proposed by writers based on empirical tests for various countries. First group, Willmore (1976, 1986 and 1992), Reidel (1975), and Lall and Mohammad (1983) using the matched pairs, ANOVA and OLS methods, conclude that foreign firm's performance is better than domestic firms particularly in exports. Second group, Jenkins (1979), Cohen (1975), Chen (1983) and Subrahmanian and Mohanan Pillai (1979) using z-test, no significant test, and matched pairs methods, argued that domestic companies appear to be performing better than foreign companies. Third group of authors, Newfarmer and Marsh (1981), Fairchild (1977), Carvalho (1977), Morgenstern and Muller (1976), Cohen (1975), Gershenberg et al. (1978), Jayasuriya, Oczkowski, and Athukorala (1995), Kumar (1990), Pant (1993), and Subrahmanian and

Joseph (1994) using regression, matched pairs, no significant test, t-test, logit and OLS methods, said that there is no significant difference between foreign multinationals and domestic companies (refer Table-2).

3.Significance of the Study

There is a small but growing literature in the area. Kumar (1994) has given a detailed assessment of the actual performance of foreign companies in India during the period up to 1980s. Most of the recent studies on FDI in India have focussed on issues such as trends and determinants of FDI, the difference between approvals and actual inflows, the relative-export performance of foreign and domestic companies, spillovers and FDI's impact on export performance of host economies. However, a detailed assessment of the overall performance on the broad dimensions of performance namely; finance, trade and technology of foreign multinationals and domestic companies over a long enough period covering the phase of liberalisation is found wanting. The changes in the industrial policy, the prominence of FDI in the globalised scenario, as well as the gap in the literature on the overall comparative performance of foreign multinationals and domestic companies have prompted us to carry out this study.

4.Methodology and Data Source

In order to compare the relative performance of foreign multinationals, and domestic companies (DCs) in the post reform period we have looked in to three dimensions of performance viz. finance, trade and technology. The analysis of performance has been carried out at the both aggregate and disaggregated level. At the disaggregated level the industries covered are chemicals, engineering, tea, textiles, and trading. The study covers the post-reform period from 1991-2004. The tools used for analysing the data are simple ratios and the test of significance. Financial performance of domestic and foreign multinationals companies is analysed by computing averages of simple financial ratios. Financial ratios are a good measure of financial performance. We have computed the following major financial ratios viz., (i) capital structure ratio, (ii) liquidity ratio, (iii) assets utilisation and turnover ratio, and (iv) profitability and profits allocation ratio. For the two groups viz., foreign multinationals companies (FMCs) and domestic companies' average financial ratios (e.g. sales to capital employed, return on capital employed, and return on net worth) were calculated and the difference between the two averages were tested using standard statistical tools.

Four indicators have been employed to analyse the trade performance between domestic and foreign firms namely, export intensity, import intensity, net export intensity (net foreign exchange intensity) and raw material import intensity. Export intensity is defined as the ratio of firm level exports to its sales in a year. It reflects the firm's extent of interaction with foreign consumers and foreign markets, and the consequent learning from them. Import intensity is defined as the ratio of firm level imports to its sales in a year and raw material import intensity is defined as the value of raw material import by the firm to its sales value. The net export is the difference between value of export and value of import of a firm in a year.

The third dimension of performance is technology, assessed by measuring the research intensity, as well as embodied and disembodied technology import intensity. Research intensity/ R&D intensity (Research and Development Intensity) is defined as the ratio of R&D expenditure of firms to its sales value in a year. It refers to the firm's attempt to develop, adapt and absorb new technologies. Technology import by the firms is measured using technology import intensity. It is defined as the ratio of firm's expenditure on technology import to its sales value. There are two types of technology import intensities namely, embodied technology imported intensity (ETII) and disembodied technology-imported intensity (DTII). Firm's embodied technology import intensity is defined as the ratio of expenditure on capital goods imports to its sales value in a year. The disembodied technology import intensity is the expenditure incurred by a firm on royalty and know-how expenses to its sales value in a year.

Selection of Firms

Table-2 shows the distribution of foreign multinationals and domestic companies in selected industries according to the CMIE "PROWESS" database. As per the CMIE "PROWESS" database in 2005 there were a total of 4,612 companies, of which 246 companies (5% of total) were identified as foreign multinationals and 4,366 companies (94% of total) as domestic. It shows a highly unbalanced distribution of foreign firms compared with domestic firms. Industry wise distribution of firms is as follows: - Engineering (125 foreign multinationals and 1,479 domestic companies), Chemicals (80 foreign multinationals and 1,207 domestic companies), Tea (7 foreign multinationals and 119 domestic companies), Textiles (22 foreign multinationals and 760 domestic companies) and Trading (12 foreign multinationals and 749 domestic companies). This reveals that domestic companies in each industry are more than ninety per cent. It is extremely difficult to explain why the database does not furnish information on all the firms covered by it. It could either be due to information being not provided by firms themselves to CMIE or because of a lag in the compilation of data.

Table-3: Distribution of Foreign Multinationals and Domestic Companies in the Selected Industries

Industries	**No. of Foreign Multinationals**	**No. of Domestic Companies**	**Total Companies**
Chemicals	80 (6.22)	1,207 (93.78)	1,287 (100)
Engineering	125 (7.79)	1,479 (92.21)	1,604 (100)
Tea	7 (5.56)	119 (94.44)	126 (100)
All Textiles	22 (2.81)	760 (97.19)	782 (100)
Trading	12 (1.58)	749 (98.42)	761 (100)
Total	246 (5.33)	4,366 (94.67)	4,612 (100)

Source: CMIE Prowess Database (2005).

Notes: Figures in bracket indicate percentage.

Data Source

The present study relies on secondary data compiled from two main sources. The basic data sources used in this study are "Finances of Foreign Direct Investment Companies" published by RBI, and "PROWESS" electronic database supplied by the Centre for Monitoring Indian Economy (CMIE). We have compiled the data set on FDI firms from

the combined Statement on income, expenditure and appropriation accounts published by RBI on the basis of the details furnished by foreign firms. The data provided by RBI covers entire industries and does not provide information at firm level. Therefore, data at individual firm level has been culled out from "PROWESS" electronics database.

5.Performance of Foreign Multinationals and Domestic Companies

Financial Performance

The basic idea of doing a financial analysis is to assess objectively the performance of a firm/company on a number of aspects such as its resourcefulness and ability to earn a fair return on its investment/capital employed (CE), firm's ability to meets its current finance obligations effectively etc. Financial performance measured using three ratios namely, profitability ratios, liquidity ratios and structural ratios. Most of the recent studies have focussed on the profitability of foreign and domestic companies. For instance, the available evidence from the literature gives the impression that foreign companies fare better than domestic companies in the case of profitability (Lall and Streeten, 1977) For instance, Kumar (1994) pointed out that 'foreign controlled-enterprises perform better than local enterprises in terms of profitability'. On other hand, Subrahmanian and Joseph (1994) argued that domestic companies appear to be performing better than foreign companies in the case of profits.

In contrast, empirical evidence from the present study shows that there is no significant statistical difference between foreign and domestic companies both at the aggregated and disaggregated level with the sole exception of chemicals industry. This is because ratios of profitability namely, sales to capital employed, return on net worth (ronw) and return on capital employed were found statistically not significant at the five per cent level. This result rejects our alternative hypotheses (refer Table-4).

Trade Performance

The impact of foreign direct investment in the promotion of exports of manufactured products from developing countries, especially trade performance of multinationals as compared to local counterparts have long been a subject of policy interest and academic debate. Thus, a review of the major findings in India reveals that the empirical evidence available so far is fragmentary and no clear-cut consensus is arrived at on the relatively greater export intensity of the firms be it under foreign ownership-control or domestic ownership. The available evidence shows that there is a significant statistical difference between foreign and domestic companies in the trade performance at the aggregate level. In other words, domestic companies fare better than foreign companies at the aggregate level especially, since 1998 it is found that except tea industry, there is no significant difference between foreign and domestic firms at the disaggregated level. Table-2 (pp.9) presents the second group, Jenkins (1979) for Mexico; Cohen (1975) for Singapore; Chen (1983) for Hong Kong and Subrahmanian and Mohanan Pillai (1979) for India, using z-test, no significant test, ANOVA, and matched pairs methods and argued that the domestic companies appear to be performing better than foreign multinationals. In fact, available evidence from the present study gives the results that the domestic companies fare better than foreign companies in the case of trade performance at the aggregate level

in India during the period 1998-2004 (refer Table-4). However, we can also see that there is no significant difference between foreign multinationals and domestic companies in the case of trade performance in industries like engineering, chemicals, trading and textiles.

Table-4: Performance of Foreign Multinationals and Domestic Companies in India, 1991-2004*

Industries	Financial Performance	Trade Performance	Technology Performance
Aggregate Level	STC: insignificant ROCE: insignificant RONW: insignificant	EX: insignificant IM: significant NEX: significant	R&D: insignificant ETII: insignificant DTII: significant
Result	DCs and FMCs insignificant	DCs > FMCs significant	DCs and FMCs insignificant
Chemicals Industry	STC: insignificant ROCE: significant RONW: insignificant	EX: insignificant IM: insignificant NEX: insignificant	R&D: insignificant ETII: insignificant DTII: significant
Result	DCs < FMCs significant	DCs and FMCs insignificant	DCs and FMCs insignificant
Engineering Industry	STC: insignificant ROCE: insignificant RONW: insignificant	EX: insignificant IM: significant NEX: insignificant	R&D: insignificant ETII: insignificant DTII: significant
Result	DCs and FMCs insignificant	DCs and FMCs insignificant	DCs and FMCs insignificant
Tea Industry	STC: insignificant ROCE: insignificant RONW: insignificant	EX: significant IM: significant NEX: significant	R&D: DC < FMCs ETII: DC < FMCs DTII: DC < FMCs
Result	DCs and FMCs insignificant	DCs < FMCs significant	DCs < FMCs
Textiles Industry	STC: significant ROCE: insignificant RONW: insignificant	EX: insignificant IM: insignificant NEX: insignificant	R&D: DCs < FMCs ETII: DCs < FMCs DTII: DCs < FMCs
Result	DCs and FMCs insignificant	DCs and FMCs insignificant	DCs < FMCs
Trading Industry	STC: insignificant ROCE: insignificant RONW: insignificant	EX: insignificant IM: insignificant NEX: insignificant	R&D: DCs < FMCs ETII: DCs < FMCs DTII: DCs < FMCs
Result	DCs and FMCs insignificant	DCs and FMCs insignificant	DCs < FMCs

*Significant at the 5 per cent level, STC = sales to capital employed, ROCE = return on capital employed, RONW = return on net worth, EX = export intensity, IM = import intensity, NEX = net export intensity.

ETII and DTII = embodied and disembodied technology import intensities, DCs< FMCs means that FMC's average higher than domestic companies.

Technology Performance

Technology performance deals with the performance of foreign and domestic companies in technology at the aggregate and disaggregated level during the period 1991-2004. The available studies suggest that foreign companies as a whole are technologically 'superior' than domestic companies (Bell and Marin, 2006). This is because MNCs conduct a large share of the world's R&D and also possesses the bulk of the world's stock of advanced commercial technologies. Most of the Research & Development is conducted within the parent or headquarters of a company and results are primarily transferred to own affiliates of the host countries (Okamoto and Sjoholm, 2003).

Thus, a review of the findings in the case of India reveals that the empirical evidence available so far is not clear and no conclusion can be arrived at on the relatively greater R&D intensity of the firms under foreign ownership as against domestic ownership. Evidence from the literature gives the information that MNCs/FDI has a positive impact on R&D activity of local firms. This study gives the impression that there is no statistical difference between foreign multinationals and domestic companies at the aggregate level as well as industries like chemicals and engineering. On other hand, the available evidence suggests that there is a significant difference between foreign multinationals and domestic companies in the case of disembodied technology import intensity both at the aggregate and disaggregated level. In contrast to conventional wisdom, which states that foreign companies have technological superiority and higher expenses on R&D activities, we find that this hypothesis is not valid at the aggregate level and disaggregated level in industries like chemicals and engineering (refer Table-4).

6. Conclusion

The major conclusions drawn from the study areas are as follows: Firstly, there is no statistically significant difference between foreign and domestic companies in the financial, and technology performances at the aggregate level. Second, evidence shows that there is no significant statistical difference between foreign and domestic companies in the case of financial, trade, and technology performances at the disaggregated level. But the available evidence provides the information that there is a significant statistical difference between foreign and domestic firms in the trade performance at the aggregate level. Now we can raise the question where we do stand? Or what can India do? Whether India must accelerate FDI inflows or not?

At this juncture, some policy suggestions would be fruitful. First, FDI policies must ensure both the quality and quantity of inflows to the country by adopting more priorities and incentives based mechanisms including special concessions to foreign companies if they are willing to undertake technology transfer. The policy can take different directions. At the foremost, the trade performance of foreign companies appears to be poorer. This is because none of the leading exports from India involves much foreign company's participation. Hence, FDI also accounts for a relatively very small share of manufactured exports in India. In general, the policy of FDI does not seem to promote exports of

foreign companies and may even inhibit it. Therefore, India's FDI policy must give more incentives to foreign firms if they are willing to accept export-obligations. Further, technology performance of foreign multinationals appears to be poorer. This is because research and development activities and embodied technology imports especially, capital goods imports of foreign companies seem to be lacking. Therefore, FDI policy should aim at providing more incentives to upgrade R&D activities of foreign companies in India and also we must reduce trade barriers including, tariffs and customs duties on importing capital goods by foreign companies. In addition to these, national treatment for foreign multinationals and stable, transparent policies can help the course. But the ultimate issue is that the results must be ultimately reflected in their overall performance, which is found lacking by our present study.

Issues for Further Research

Admittedly the study has used a level of disaggregation that is too small to be considered as disaggregated. Hence, this study could be extended at the disaggregated level by taking up a more meaningful classification of the industrial sector.

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